Synthesis and Assessment Product 4.4

Preliminary Review of Adaptation Options for Climate Sensitive Ecosystems and Resources

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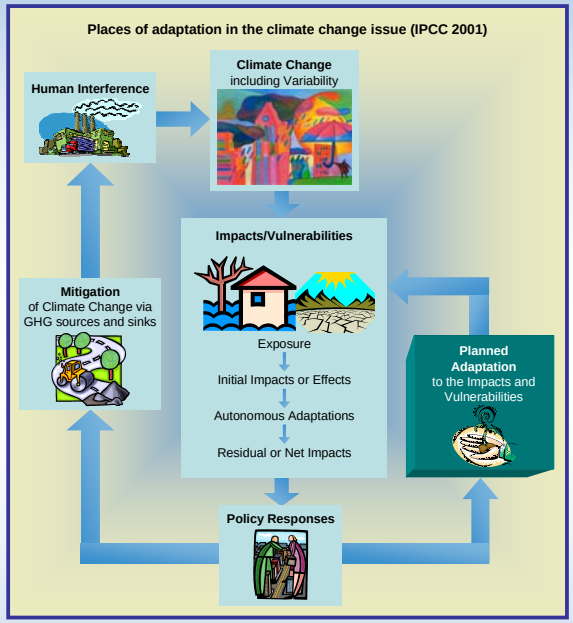
US Climate Change Science Program
www.climatescience.gov

Project Goal

Provide information on the potential for adaptation interventions and research to help decision makers reduce the risks of harmful ecological outcomes and take advantage of beneficial ecological outcomes associated with climate change.



Project Team

Lead Agency

- US Environmental Protection Agency

Supporting Agencies

- US Department of Agriculture
- US Department of Interior
- National Aeronautics and Space Administration
- National Oceanic and Atmospheric Administration

Background

Climate is a dominant factor influencing ecosystems and species. Potential future climate change effects include:

- Increases in the risk of species extinction
- Disruption of plant and animal communities
- Loss of valuable ecosystem services

Potential effects can be reduced through management activities that facilitate adaptation and increase resilience.

Certain factors affect the ability to implement strategies. These factors include: Information and tools that are needed to adapt but that never make it to managers' ears; lack of resources to implement adaptation alternatives; and managers select sub-optimal responses.

Even with improvement in knowledge and communication of available and emerging adaptation strategies, the feasibility and effectiveness of a system/entity to adapt depends on its adaptive capacity. Adaptive capacity is determined by physical, economic, social, cultural, institutional and technological conditions that could enhance or hinder adaptation. These factors that influence the likelihood or ability of selected systems and entities to adapt need to be better understood.

Proposed Content

Key Focus Questions

The questions below encompass the issues to be addressed in order to meet the goal of Synthesis and Assessment Product 4.4:

1. What are the local, regional, and national decisions and ecological endpoints related to resource management that are sensitive to climate change?
2. What are the adaptation interventions that could be used to mitigate the potential impacts of climate change?
3. How can on-going management activities currently carried out without thought to climate change be enhanced to also increase resilience and facilitate climate adaptation?
4. What are the factors or constraints affecting implementation of adaptation strategies and what methods are available for evaluating their effectiveness?
5. What should future research priorities be to support adaptation advancements for the most sensitive endpoints, decisions, or systems?

Process

First draft will be subject to an expert, scientific review. EPA will convene a Federal Advisory Committee to serve as expert scientific reviewers. Nominations for expert peer reviewers can be provided to representatives of the lead agency on or before December 2005.

Second draft will be posted for public comment on the CCSP website. There will be a public comment period of 45 days.

Third draft will be subject to final review and approval through the CCSP interagency committee and the National Science and Technology Council. All relevant standards of the Information Quality Act will be met.

Project Timeline

The following schedule is proposed for the development of CCSP Product 4.4:

Due Date		Task
2005	Dec	Draft prospectus posted on CCSP web site for 30 day public comment
2006	Jan	Final prospectus posted on the CCSP web site
		First Coordinating and Lead Authors meeting
	Jun	Rough outline for Synthesis Report
	Nov	First draft of Synthesis Report completed for expert review
2007	Jan	Expert review completed
	Apr	Second draft of Synthesis Report completed for public review
	Jun	Public comment on second draft completed
	Aug	Third draft of Synthesis Report completed
		Third draft of Synthesis Report submitted to CCSP Interagency Committee
	Dec	Final product posted on CCSP web site

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